

CLAIMS

What is claimed is:

1. A method for assuring pathogen-free and chemical residue-free fresh perishable products, comprising:
delivering harvested product to a processing site;
subjecting said harvested product to a first cleaning with an application of a water and ozone mixture;
sorting or grading said product under conditions of continued contact with water and ozone;
drying said product;
packaging said product in sanitized containers;
testing packaged products for levels of pathogens;
storing said packaged product at refrigerated temperatures;
transporting said product to sanitized transport means for retail delivery; and
delivering said product to retail sites.
2. The method according to claim 1 further comprising testing said stored product for pathogen level prior to transporting to said sanitized transport means for retail delivery.
3. The method according to claim 2 further comprising testing said product following delivery of said product to a retail site to assess pathogen levels.

4. The method according to claim 3 further comprising contacting said product with a water and ozone mixture at said retail site to assure continued pathogen-free conditions of said product.

5. The method according to claim 1 further comprising contacting said product with a water and ozone mixture at said retail site to assure continued pathogen-free conditions of said product.

6. The method according to claim 1 wherein said ozone to water mixture is between about 1.0 ppm and about 1.5 ppm.

7. The method according to claim 1 wherein said cleaning, sorting, grading, drying, packaging and storage of said product takes place in an enclosed environment cleaned by diurnal applications of admixed water and ozone.

8. The method according to claim 1 wherein the processing of said product from refrigerated storage to delivery at retail sites is monitored by a global positioning system capable of receiving and transmitting data concerning said product in transit.

9. The method according to claim 1 wherein said product is intermittently tested for pathogen levels during the processing of said product from delivery to the processing facility to the purchase of the product by consumers.

10. The method according to claim 1 wherein said product comprises fresh fruits, vegetables, herbs, flowers, meats, poultry, game and seafood, or combinations thereof.

11. The method according to claim 1 wherein said first cleaning of said product occurs at a temperature of from about 60° F to about 65° F.

12. The method according to claim 1 wherein said water and ozone mixture is applied to said product in the form of a spray or mist.

13. The method according to claim 1 wherein said product is dried at a temperature of up to about 70° F to about 75° F.

14. The method according to claim 1 wherein said product is stored at a temperature of from about 34° F to about 56° F.

15. The method according to claim 1 wherein said product is transported from storage to a retail site at a temperature of from about 38° F to about 47° F.

16. The method according to claim 1 wherein said packaging of said product occurs at a temperature of from about 60° F to about 65° F.

17. The method according to claim 1 wherein said product is further tested intermittently from the point of harvest to the point of retail sale for pH levels, chlorine levels, oxidation-reduction potential or combinations thereof.

18. A method for producing and maintaining essentially pathogen-free and chemical residue-free fresh perishable products, comprising: /
providing a processing facility having clean room conditions for processing fresh perishable products, said processing facility also having a data collection system;
providing fresh perishable product;
delivering said fresh perishable product to said processing facility for processing;
subjecting said fresh perishable product to a mixture of water and ozone in a percent concentration sufficient to achieve better than a 5-log pathogen reduction in said product;
packaging said product under clean room conditions to maintain said pathogen reduction;
testing said packaged product for pathogenicity below a 5-log pathogen reduction;
storing said packaged product under clean room conditions;
transporting said stored product under clean conditions to retail sites;
monitoring the processing facility conditions from delivery of said fresh perishable product to storage of said product and storing data derived from said monitoring in said data collection system; and

collecting and storing testing data from said testing of said product in said data collection system.

19. The method according to claim 18 further providing a global positioning system structured to receive data relating to the environmental conditions of said product from transport of said product to delivery to a retail site and capable of transmitting said data to said data collection system of said processing facility.

20. The method according to claim 19 wherein said global positioning system includes an air-borne device structured to receive and transmit said data relating to said product.